

RCA 68783

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Claims

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1. A method for managing access to a signal representative of an event of a service provider, said method comprising:

(a) receiving said signal in a smart card, said signal being scrambled using a scrambling key;

10 (b) receiving, in said smart card, data representative of a first seed value;
characterized in that

(c) generating said scrambling key using said first seed value and a second seed value, said second seed value being pre-stored in said smart card;

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(d) descrambling said signal using said generated scrambling key to provide a descrambled signal.

2. The method of Claim 1 wherein said first and second seed values are
20 points on a Euclidean plane.

3. The method of Claim 2 wherein the step of generating said scrambling key comprises calculating the Y-intercept of a line formed on said Euclidean plane by said first and second seed values.

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4. The method of Claim 3 wherein said smart card has a card body having a plurality of terminals arranged on a surface of said card body in accordance with one of ISO 7816 and PCMCIA card standards.

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5. In combination in a system for managing access between a service provider and a device having a smart card coupled thereto, said device performing the steps of:

- (a) receiving from the service provider a signal representative of an event, said signal being scrambled using a scrambling key;
- (b) receiving from the service provider data representative of a first seed value, said first seed value being selected from a Euclidean plane; characterized in that
- (c) coupling said scrambled signal and said first seed value to said smart card, said smart card having a means for access control processing; said access control processing means comprising means for generating said scrambling key by calculating the Y-intercept of a line on said Euclidean plane by said first seed value and a second seed value, said second seed value being pre-stored in said smart card and means for descrambling said signal using said generated scrambling key to generate a descrambled signal; and
- (d) receiving from said smart card said descrambled signal.

6. The combination of Claim 5 wherein the device is a set-top box.

7. The combination of Claim 5 wherein the device is a digital television.

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8. The combination of Claim 5 wherein the device is a digital video cassette recorder.